

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated November 1, 2010 has been received and its contents carefully reviewed.

By this response, claims 1 and 18 have been amended. No new matter is added. Accordingly, claims 11 and 15-18 are presently pending.

In the Office Action, claims 11, 15-16 and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Carr et al. (U.S. Patent 6,391,378) in view of Yamada et al. (U.S. Patent 6,001,203) and further Enchi et al. (U.S. Patent 6,455,099) in view of Levey et al. (U.S. patent 5,409,545) and further Kitahara et al. (U.S. Patent 6,595,819). Further, claim 17 is rejected under 35 U.S.C. §103(a) as being unpatentable over Carr et al. (U.S. Patent 6,391,378) in view of Yamada et al. (U.S. Patent 6,001,203) and further Enchi et al. (U.S. Patent 6,455,099) in view of Levey et al. (U.S. patent 5,409,545) and further Kitahara et al. (U.S. Patent 6,595,819) and further Vinouze et al. (U.S. Patent 5,431,771).

Applicant respectfully traverses these rejections as being based on references that neither describes nor suggests the novel combination of features now recited independent claims 11 and 18, as amended.

Independent claim 11 now recites a combination of features including, for example, “loading a substrate on a table; lowering a body supporting a syringe having a nozzle at one end towards the substrate, wherein the lowering is performed at a first speed...; lifting up the body..., wherein the lifting is performed at a second speed, and wherein the second speed is slower than the first speed...; positioning the body so that the nozzle reaches a desired height from the initial value and controlling the gap between the substrate and the nozzle to be maintained at a certain interval; and horizontally moving the table with the loaded substrate in forward/backward and left/right directions while a sealant is being dropped through the nozzle onto the substrate to form a seal pattern.”

Independent claim 18 now recites a combination of features including, for example, “loading a substrate on a table; lowering a body supporting a syringe having a nozzle at one end towards the substrate using a vertical driving motor..., wherein the lowering is performed at a first speed...; lifting up the body..., wherein the lifting is performed at a second speed, and wherein the second speed is slower than the first speed...; positioning the body, so that the

nozzle reaches a desired height from the initial value and controlling the gap between the substrate and the nozzle to be maintained at a certain interval; and horizontally moving the table with the loaded substrate in forward/backward and left/right directions while the dropping material within the syringe is being dropped through the nozzle onto the substrate.”

That is, in the claimed invention, the body 504 with the syringe 503 installed therein is moved, an undersirable material may be generated by the horizontal driving of the dispenser and absorbed onto the substrate 501. Accordingly, the table 500 with the loaded substrate 501 may be horizontally moved in forward/backward and left/right directions in forming a seal pattern.

In the contrast to the claimed invention, referring to FIG. 1 of Enchi et al., a nozzle robot 13 moves dispensing nozzle (feeding nozzle) 12 in a vertical direction, and an X-axis robot 14 moves the head axis in a horizontal X-direction, and a Y-axis robot 15 moves a substrate 1 in a horizontal Y-direction. The Y-axis robot 15 moves a substrate 1 in a horizontal Y- direction but does not move the substrate 1 in a horizontal X-direction. That is, substrate 1 does not move in a horizontal X-direction to dispense the sealant but the X-axis robot 14 moves the head axis in X-direction to dispense the sealant. Accordingly, in Enchi et al., when the dispenser 11 is moved to dispense a sealant, an undersirable material may be generated by the horizontal driving of the dispenser 11 and absorbed onto the substrate 1.

However, the table 500 with the loaded substrate 501 of the claimed invention is horizontally moved in forward/backward and left/right directions in forming a seal pattern but the body 504 with the syringe does not moves in forward/backward and left/right directions in forming a seal pattern.

Accordingly, Enchi et al., differs from the claimed invention in view that the table 500 with the loaded substrate 501 is horizontally moved in forward/ backward and left/right directions in forming a seal pattern as recited in the claimed invention.

Therefore, Carr et al. in view of Yamada et al. and further Enchi et al. in view of Levey et al. and further Kitahara et al. and further Vinouze et al. fail to teach or suggest “the table 500 with the loaded substrate 501 is horizontally moved in forward/ backward and left/right directions in forming a seal pattern” as recited in amended claims 11 and 18.

Thus, Applicant respectfully asserts that Carr et al. in view of Yamada et al. and further Enchi et al. in view of Levey et al. and further Kitahara et al. and further Vinouze et al. do not teach or suggest each and every feature recited in independent claims 11 and 18, as amended.

Accordingly, Applicant respectfully requests that the 35 U.S.C. § 103(a) rejections of independent claims 11 and 18, as amended, be withdrawn. Further, Applicant respectfully requests that the 35 U.S.C. 103(a) rejections of dependent claims 15 to 17 be withdrawn at least because of their dependence on independent claim 11, and for additional features that they recite.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to Deposit Account No. 50-0911.

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Respectfully submitted,

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